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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,956	10/11/2001	Masaru Hirata	14990	7595
23389	7590	01/25/2006	EXAMINER	
SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530			HOQUE, NASRIN	
			ART UNIT	PAPER NUMBER
			2631	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/974,956	HIRATA, MASARU	
	Examiner	Art Unit	
	Nasrin Hoque	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>09/02/2003</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendments entered on 11/10/2005 has been considered and made of record. Claims 1-6 are pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1- 3, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA, and further in view of in view of Easton (Patent No: 5,764,687) and Kandala (Patent No: 6,289,061).

- Regarding claims 1 and 2, APA discloses all the subject matters. APA discloses that a mobile station in CDMA communication system is composed of plurality of finger sections which receive plural radio waves from a base station and a finger allocation unit allocating a path timing corresponding to each of said plurality of finger sections, each of which being spread in path tracking range among segments positioned before and after path timing allocated by finger allocating section (APA: Fig 1, blocks 8, 9,10 and page 2, lines 6-26, page 3, line 1 and page 4, lines 10-12).

APA does not disclose the limitation of variable path tracking and the path tracking range being independently determined for each of plurality of finger section.

Easton discloses that the tracking ranges can be varied because the peak from the correlate may move in time (Easton: Fig 1, column 3, lines 5-11 & lines 25-31 and Fig 3, block 122, column 9, lines 5-7). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate Easton's teaching in the APA so as to adaptively tracking the finger section.

Kandala discloses that for path tracking purpose, the output of the matched filter is being considered within a window of time and include only the paths which are within the window (Kandala: Fig 4, blocks 36-40 & Fig 5, block 36, lines column 6, lines 14-19) which is equivalent of tracking range before and after per claimed. At the time of the invention, it would have been obvious to a person of ordinary skill in the art that implementation of a selective duration allows to drop the signals which are not within the defined window allows for error generation and corrective action accordingly.

- Regarding claims 3, 6 (which inherits limitations of claims 1 and 5), APA, Easton and Kandala discloses all the subject matters as applicable to claim 1 and 5, except addressing the limitation of relationship between peak positions and relative distance. APA discloses that a for a multi-path scenario, a plurality of

peaks of radio waves can be detected in a delay profile (APA: Fig 1, blocks/sections 4, 8 and 9, page 2, lines 23-25) and a path tracking range is allocated for fingers (APA: page 4, lines 10-12). Easton discloses that a one-microsecond path delay corresponds to a differential path distance of approximately 300 meters (Easton: column 2, lines 9-11); therefore it is obvious that the range is related to the distance of peak positions for delayed set of signals.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over APA, and further in view of in view of Easton, Kandala and Fattouche et al. (Patent No: 6,208,297). Regarding claim 4 (which inherits limitation of claim 3), APA, Easton and Kadala discloses all subject matters as applicable to claims 1 and 3 but does not explicitly specify reception of plurality of radio waves, conversation of radio signal in to base band and conversion of analog signals into digital signals (which are inherent for digital communication based on receiver and application type). However, Fattouche discloses that an antenna of a mobile receiver (MR) is receiving a plurality of signals from BST (Base Station Transmitters) which is equivalent of receiving plurality of radio waves through plurality of paths (Fattouche: Fig 2, column 6, lines 30-33); Fattouche further specifies that a number of IF stages are used to convert RF signals into base band signals (Fattouche: Fig 8, block 810, column 36, lines 46-54) and an ADC and DDC are implemented to convert from analog to digital and into base band signal (Fattouche : Fig 8 , blocks 812, 815, column 36, lines 63-65) per claimed.

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At the time of the invention, it would have been obvious to a person of ordinary skill in the art that the ability to receive plurality of signals by a receiver ensures to locate the location of the receiver (compared to a receiver designed to receive single signal) to process emergency call like E911; it also allows to locate fraudulent calls promptly.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art of instant application (APA) in view of Kandala et al. (Pub No: 2002/0015399). Regarding claim 5, admitted prior art of instant application (APA) discloses that a mobile station on CDMA communication system involves a finger sections for spreading a radio wave(s) received via multi path (Fig 1, blocks/sections 20, 4, and 8, page 1, lines 1-28 and page 3, lines 1-5) which can support the following:

- Allocating a path timing corresponding to peak position of a detected received radio signal (Fig 1, blocks/sections 4, 8, and 9, Page 2, lines 26-29, page 3, line 1).
- The finger section decides the path tracking range (Fig 4, block /section 9, Page 4, lines 10-11).
- The radio waves are being inversely spread within the track range among segments positioned before and after path timing in finger sections (Fig 4, block /section 11, Page 4, line 6-9) and a path tracking range is allocated for fingers (page 4, lines 10-12).

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APA does not explicitly specify path tracking for each of plurality of finger section being variable. Kandala discloses that for path tracking purpose, the output of the matched filter is being considered within a certain window of time and include only the paths which are within the window (Kandala: Fig 4, blocks 36-40 & Fig 5, block 36, lines column 6, lines 14-19) which is equivalent of tracking range before and after per claimed. it is obvious that via design choice variable windows can be supported.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art a variable peak level threshold and variable noise level threshold can be supported for variable paths (i.e. a specific selection from a plurality of finger selection) and error can be minimized by implementing variable window/path tracking range which will allow the service providers to maintain service level agreement with Clint's / agreed system performance.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any


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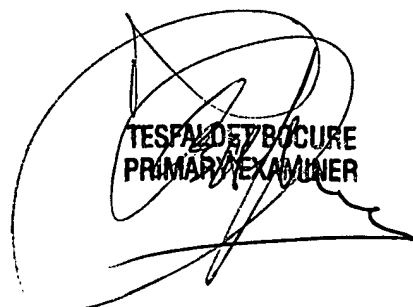
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nasrin Hoque whose telephone number is 571-272-5948. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, T. Bocure can be reached on 571-272-3015. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Nasrin Hoque
Examiner
Art Unit 2631


TESFALE D. BOCURE
PRIMARY EXAMINER